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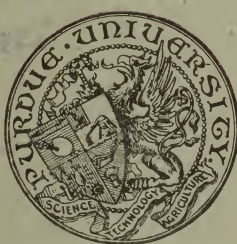
PURDUE UNIVERSITY

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SCHOOL OF PHARMACY

UNIVERSITY OF ILLINOIS
FEB 24 1917



Catalogue for 1898-99

Announcement for 1899-1900

PURDUE UNIVERSITY

SIXTEENTH ANNUAL
ANNOUNCEMENT.....

OF THE

School of Pharmacy

1899-1900

INDIANAPOLIS:

Wm. B. Burford, Contractor for State Printing and Binding

1899

BOARD OF TRUSTEES.

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OFFICERS OF THE BOARD.

DAVID E. BEEM.....	ACTING PRESIDENT.
EDWARD A. ELLSWORTH.....	SECRETARY.
JAMES M. FOWLER.....	TREASURER.

CALENDAR 1899-1900.

1899.

Entrance examination...	Tuesday, September 12, 9 A. M.
First term begins.....	Wednesday, September 13, 10:15 A. M.
Thanksgiving recess—	
From.....	Wednesday, November 22, 12 M.
To.....	Tuesday, November 28, 8:15 A. M.
First term ends.....	Thursday, December 21, 12 M.

1900.

Examination of delinquents.....	Tuesday, January 2, 9 A. M.
Second term begins	Wednesday, January 3, 10:15 A. M.
State examination.....	Thursday, March 22, 9 A. M.
Second term ends.....	Friday, March, 23, 4:30 P. M.
Third term begins.....	Monday, March 26, 8:15 A. M.
Course I ends.....	Wednesday, March 28.
Third term ends.	Tuesday, June 5, 4:30 P. M.
Commencement.....	Wednesday, June 6.

SCHOOL OF PHARMACY.

FACULTY.

JAMES H. SMART, A. M., LL. D.,
President of the University.

ARTHUR L. GREEN, PH. C., PH. D.,
Dean and Professor of Chemistry.

STANLEY COULTER, PH. D.,
Professor of Biology.

JULIUS W. STURMER, PH. G.,
Professor of Pharmacy.

GEORGE SPITZER, PH. G.,
Lecturer on Operative Pharmacy.

BENJAMIN M. HOAK, PH. G.,
Instructor in Materia Medica and Biology.

SEVERANCE BURRAGE, B. S.,
Instructor in Sanitary Science.

CHARLES E. VANDERKLEED, PH. G., PH. C.,
Student-Assistant in Chemistry.

GEORGE J. NUSSBAUM, PH. G.,
Student-Assistant.

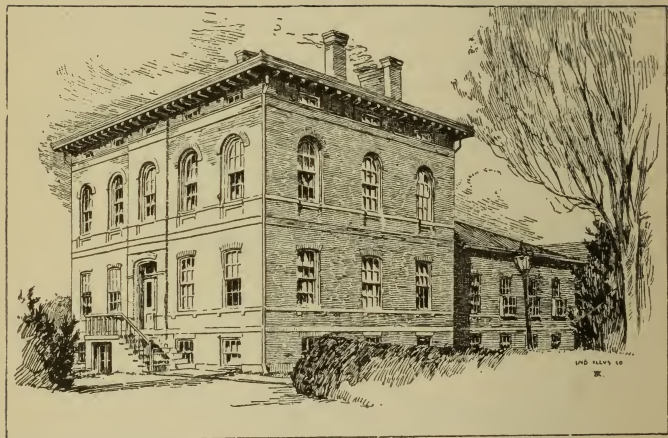
JOSEPH O. PERKINS, PH. G.,
Student-Assistant.

GEORGE D. PARKS,
Special Lecturer on Pharmaceutical Jurisprudence.

JAMES D. HILLIS, M. D.,
Special Lecturer on Electro-Therapeutics.

STATE EXAMINERS.

F. H. BURTON Evansville.
W. O. GROSS Ft. Wayne.
C. E. ELLIOTT Sheridan.



PHARMACEUTICAL LABORATORY.

GENERAL STATEMENT.

PURDUE UNIVERSITY is the State Institute of Technology. It derives its name, through legislative enactment, from John Purdue, who gave to the State for the use of the institution one hundred and fifty thousand dollars. It has also received other gifts from individuals and from Tippecanoe County to the amount of three hundred and twenty-five thousand dollars.

It has an endowment fund of three hundred and forty thousand dollars, received from the general government, and is further supported by legislative appropriations and by the proceeds of annuities granted by the general government.

Its non-productive plant is valued at six hundred and fifty thousand dollars. This includes one hundred and eighty acres of land, twenty buildings, and a most extensive equipment, including laboratories, shops, museums, library, and reading rooms.

The institution embraces six schools: Mechanical Engineering, Civil Engineering, Electrical Engineering, Agriculture, Science, and Pharmacy.

The School of Pharmacy offers excellent training for those who expect to engage in a dispensing

pharmacy, and for those who desire to enter the laboratory of a manufacturing pharmacist. The instruction also constitutes a good preparatory course for those who anticipate attending a school of medicine.

Students in Course I are engaged at the University about six hours each day. About two-thirds of this time is devoted to laboratory work, and one-third to lectures and recitations. There are neither lectures, recitations nor quizzes in the evening, that time being allotted to home study and to preparation for the ensuing day's work. The student has, therefore, no time for clerking in a drug store, and must devote his undivided time and energy to his school work.

A complete catalogue of the University will be sent on application.

All correspondence relating to the School of Pharmacy should be addressed to ARTHUR L. GREEN, Dean, LaFayette, Indiana.

JAMES H. SMART,
President of the University.

EQUIPMENT.

LABORATORIES.—These are properly furnished with weighing tables, supply shelves, and individual working tables for the accommodation of over 100 students.

STORES AND STORE ROOMS.—All apparatus, and drugs and chemicals, used in the laboratory work described in the succeeding pages are furnished by the University; none need be supplied by the student. To expedite the issuing of drugs and chemicals there are special store rooms, as follows: One containing supplies for manufacturing chemistry and pharmacy, one for analytical chemistry, one for prescription work, and one for supplies in pharmacognosy and microscopy. The apparatus is kept in a general store room, and is furnished the student by a "storekeeper," who is always in attendance during laboratory hours. We believe that the system employed for the distribution of supplies and apparatus to the students works the highest possible convenience. Much of the student's time is saved thereby.

SPECIAL APPARATUS.—In addition to the apparatus already mentioned there is the usual lecture table apparatus for lecture experiments in chemistry and pharmacy. Also special apparatus for special work; for instance, a Laurent polariscope, a combustion furnace, a Eureka tablet machine, etc., etc.

WEIGHING FACILITIES.—For quantitative analysis, there are 12 fine analytical balances—nine Sartorius, short arm, sensitive to .0001 gm ; two Becker's analytical balances, and one balance made by Queen & Co. The prescription room is well supplied with prescription balances, and the general laboratories with balances for less delicate weighing.

SPECIMEN CABINETS.—For the study of pharmacognosy there are cabinets of over 1,200 specimens of drugs, chemicals and preparations. These cabinets are for class work, and are known as "working cabinets." There is also the Eli Lilly & Co. reference cabinet of crude drugs (roots, barks, leaves, flowers, seeds, etc.), as they occur in the drug market. Finally, a collection of rare drugs, an herbarium of medicinal plants, and a collection of minerals. For microscopic pharmacognosy, and for the detection of adulteration in drugs there are microscopes, and appliances for section cutting, mounting and similar work.

BOOKS AND LITERATURE.—The leading pharmaceutical journals are kept on file, accessible to the student. Students also have access, under certain restrictions, to the standard reference books on materia medica, chemistry and pharmacy. In the general library is the "Eliel Alcove," containing reference books presented to the School of Pharmacy by Mr. Leo Eliel, of South Bend, Indiana.

COURSES OF STUDY.

Purdue University offers two courses of study in the School of Pharmacy:

COURSE I of two years, the first year continuing thirty-six weeks, and the second year twenty-six weeks. This course leads to the degree of Graduate in Pharmacy.

For a description see below.

COURSE II of four years of thirty-six weeks each, leading to the degree of Bachelor of Science in Pharmacy. See page 23.

COURSE I.

DEGREE GIVEN.

Graduate in Pharmacy.

LENGTH OF COURSE.

The first year (thirty-six weeks) begins Wednesday, September 13, 1899, and closes Tuesday, June 5, 1900. The second year (twenty-six weeks) begins Wednesday, September 13, 1899, and ends Wednesday, March 28, 1900.

REQUIREMENTS FOR ADMISSION.

Candidates for admission must have a good knowledge of the common English branches. In arithmetic special familiarity with denominate numbers, fractions, percentage, and proportion will be required. Examination for applicants will be held Tuesday, September 12, at 9 A. M.

Those presenting satisfactory certificates of proficiency are exempt from the entrance examination. No experience in a drug store is required.

SUBJECTS REQUIRED IN COURSE I.

FIRST YEAR.

SUBJECTS.	No. of Hours in Lecture Room.	No. of Hours in Laboratory.
1. <i>Pharmacy</i>	72	108
2. <i>Inorganic Qualitative Analysis</i>	78	234
3. <i>Physiology</i>	36	.....
4. <i>Therapeutics and Doses</i>	36	.....
5. <i>Pharmacognosy</i>	18	34
6. <i>Medicinal Plants</i> .....	.....	20
7. <i>General Chemistry</i>	72	108
8. <i>Quantitative Analysis</i>	30	90
9. <i>Botany</i>	8	28
Total number of hours for the year	350	622
Average per week	27	

SECOND YEAR.

SUBJECTS.	No. of Hours in Lecture Room.	No. of Hours in Laboratory.
10. <i>General Chemistry</i>	52	.....
11. <i>Materia Medica and Therapeutics</i>	78	.....
12. <i>Manufacturing Chemistry and Pharmacy</i>	78	234
13. <i>Pharmaceutical Analysis</i>	52	156
14. <i>Microscopic Analysis of Drugs</i> .....	.....	48
15. <i>Analysis of Urine</i> .....	.....	56
16. <i>Pharmacognosy</i> .....	.....	26
17. <i>Prescription Work</i>	26	78
18. <i>State Examination</i> .....	.....	.....
Total number of hours for the year	286	598
Average per week .....	.....	34

TOTAL NUMBER OF HOURS IN COURSE I.

	In Lecture Room.	In Labora- tory.	Total.
Both years (sixty-two weeks)	636	1220	1856
Average per week	10	20	30

DESCRIPTION OF THE SUBJECTS REQUIRED IN COURSE I.

FIRST YEAR.

1. *Pharmacy.*

Class Work, 72 Hours.

(a.) Lectures and recitations on systems of weight and measure, specific gravity and its practical utility; on heat, its generation, its measurement and its use in pharmacy.

There will also be lectures and recitations on the various processes and manipulations which find application in pharmaceutical practice; as, comminution, solution, filtration, evaporation, precipitation, crystallization, percolation, etc., etc. The working formulas for the manufacture of pharmaceutical preparations will be given; the various methods will be criticised and the merits and demerits of each pointed out to the student.

(b.) The official, and the important unofficial galenical preparations will be subjected to systematic study. Special attention will be given to the chemistry involved.

(c.) The composition of the more important galenical preparations and composite medicines.

(d.) A practical course in *pharmaceutical arithmetic* will be given. Calculations which find application in practical pharmacy, in manufacturing, and in analytical work, will be taught.

Laboratory Work, 108 Hours.

In the laboratory each student will make, independently, though under the personal supervision of the instructor, the following preparations:

Medicated waters.	Extracts.
Solutions.	Masses.
Syrups.	Glycerites.
Elixirs.	Confections.
Infusions.	Honeys.
Decoctions.	Powders.
Vinegars.	Oleates.
Tinctures.	Ointments.
Fluid extracts.	Cerates.
Soluble extracts.	Plasters.
Spirits.	Pills.
Mucilages.	Capsules.
Mixtures.	Troches.
Liniments.	Suppositories.
Emulsions.	

This, like all the laboratory work in the course, is obligatory; but students who have had much experience and have acquired special skill in manufacturing will be excused from part or all of the above and provided with advanced work.

2. Inorganic Qualitative Analysis.*Class Work, 78 Hours.*

Rules are committed on precipitation and on solubility. These rules are of great value, not merely in analytical work, but also in prescription work, where they aid the student in the study of the incompatibilities of inorganic substances. The general processes for the detection of acids and bases are studied by the student. He is also taught to write the equation for each chemical reaction.

Laboratory Work, 234 Hours.

In the laboratory the student verifies the rules on precipitation and solubility; he becomes thoroughly familiar with the chemical behavior of the various acids and bases; he repeatedly works through a scheme of separation and identification of the acids and bases; he then subjects individual unknowns (mixtures of chemical compounds) to a qualitative examination, and reports his results to the instructor.

3. Physiology.*Class Work, 36 Hours.*

This subject is treated as follows: Introductory remarks on human physiology. Chemical composition of the body. The skeleton. The digestive apparatus and digestion. The circulatory apparatus and circulation. The nervous system. The muscles. The respiratory apparatus and respiration. Secretion. Excretion. The special senses. Much attention is paid to hygiene and to the diseases of the different parts of the body.

4. Therapeutics and Doses.*Class Work, 36 Hours.*

(a.) Study is made of the different therapeutic classes of remedies.

(b.) In connection with learning the therapeutic uses of medicines, the student will learn the quantities in which these medicines are administered. A carefully prepared *dose-table* is given. In this table, medicines are grouped in a manner which will enable the student to memorize them with comparative facility.

5. Pharmacognosy. (The Recognition of Chemicals and Drugs.)

Class and Laboratory Work, 52 Hours.

The student will be taught to identify chemicals and crude vegetable and animal drugs by physical characteristics—appearance, taste and color. He will also receive a thorough drill on their Latin and English names, with spelling and pronunciation. History and habitat will be given whenever of practical importance.

These studies will be pursued by the class in sections, so that each student can receive the benefit of individual instruction.

6. Medicinal Plants.

Laboratory Work, 20 Hours.

This work consists in the study of an herbarium of medicinal plants.

7. General Chemistry.

(1.) Inorganic Chemistry.

Class Work, 36 Hours.

(a.) Nomenclature and Notation. Students learn thoroughly the scientific names and the symbols of the more important chemical elements, and the scientific names and chemical formulæ of various inorganic compounds, such as hydroxids, oxids, acids, salts and anhydrids.

(b.) Recitations in General Inorganic Chemistry.

Laboratory Work, 108 Hours.

General experimental work in Inorganic Chemistry.

(2.) Organic Chemistry.

Class Work, 36 Hours.

(a.) A study is made of the classification of organic compounds, their scientific names, and their molecular and graphic formulæ.

(b.) Recitations in General Organic Chemistry.

8. Quantitative Analysis—Introductory Work.

Class and Laboratory Work, 120 Hours.

Lectures on the underlying principles of gravimetric and volumetric analysis, with laboratory work to verify and illustrate the same. In the laboratory, the student becomes familiar with quantitative operations in determining moisture, ash in filter paper, lead, iron, and sulphuric acid, by gravimetric processes; and sulphuric acid, sodium carbonate, and ammonia, by volumetric methods.

9. Botany.

Class and Laboratory Work, 36 Hours.

(a.) Lectures: Treating of the embryo, germination, with its conditions and phenomena, structure and functions of the parts of the plant body, assimilation, respiration, growth, irritability, movements and fertilization.

(b.) Laboratory Work: A general study of the parts of the plant, and of plant families.

SECOND YEAR.

10. General Chemistry.

Class Work, 52 Hours.

(a.) Inorganic Chemistry: Recitations on the chemical elements and their compounds. The order in which this part of the subject is studied is based upon the periodic system. Attention is given to the industrial and domestic uses of inorganic chemicals.

(b.) Organic Chemistry: Recitations.

(c.) Physiological Chemistry: Lectures.

11. Materia Medica and Therapeutics.

Class Work, 78 Hours.

Lectures and recitations. Chemical and pharmaceutical substances are studied in the following order:

(1.) Inorganic Chemicals and Preparations.

(2.) Organic Chemicals and Preparations.

(3.) Vegetable Drugs and Preparations.

The drugs are classified and studied according to their active constituents, as follows: Fixed oils, alkaloids, gums, mucilaginous principles, volatile oils, resins, gum-resins, balsams, starches, sugars, acids, tannins, coloring matters, and glucosides.

(4.) Animal Drugs and Preparations.

Beginning with the inorganic chemicals, each substance is treated as follows:

(a.) *Introductory and General.* Study is made of source, Latin and English names, chemical formula, official compounds and preparations, color, form, odor, taste, solubility, and preservation.

(b.) *Therapeutics.* Medical action and use, antidote and dose.

12. *Manufacturing Chemistry and Pharmacy.*

Class Work, 78 Hours.

Lectures and recitations on processes of preparation, impurities, and adulteration of chemical and pharmaceutical substances, which are studied in the following order:

- (1.) Inorganic Chemicals and Preparations.
- (2.) Organic Chemicals and Preparations.
- (3.) Vegetable Drugs and Preparations.
- (4.) Animal Drugs and Preparations.

Laboratory Work, 234 Hours.

Each student will make the following:

(a.) Inorganic Preparations. Crystallized sodium carbonate (from soda ash), sodium benzoate, sodium iodide, sodium bromide, sodium hydrate, sodium sulphite, sodium phosphate, sodium chlorate, sulphurated potassa, potassium acetate, copper sulphate, silver nitrate (from alloy), magnesium carbonate (light), magnesium carbonate (heavy), precipitated calcium phosphate, zinc chloride, yellow mercurous iodide, red mercuric iodide, yellow mercuric oxide, red mercuric oxide, mercuric chloride, mercurous chloride, mercuric subsulphate, glycerite of boroglycerine, nitrogen monoxide, nitric acid, ammonia water, sulphurated antimony, chromic anhydride, solution of hydrogen peroxide, precipitated sulphur, sulphurous acid, hydrochloric acid, chlorine water, solution of chlorinated soda, dilute hydrobromic acid, syrup of hydriodic acid, mass of carbonate of iron, syrup of ferrous iodide. Also the following scaled salts: Ferric citrate, citrate of iron and ammonium, soluble iron and quinine citrate, iron and potassium tartrate, iron and ammonium tartrate, soluble ferric phosphate, and ferric pyrophosphate.

(b.) Organic Preparations. Methane, chloroform, iodoform, alcohol (by fermentation), absolute alcohol, ether, ethyl acetate, potassium cyanide, hydrocyanic acid, oleic acid, soap, glycerine, ethylene bromide, acetylene, benzine (by distillation from crude

benzole), nitrobenzine, aniline, sodium phenol-sulphonate, picric acid, benzoic acid, salicylic acid, and artificial oil of wintergreen.

(c.) Elegant Pharmaceuticals. Elixirs, syrups, official salts of the National Formulary, toilet preparations, etc.

13. *Pharmaceutical Analysis.* (Inorganic and Organic.)

Class Work, 52 Hours.

Lectures and recitations on qualitative tests for identity and for impurities; quantitative estimations, and pharmacopœial requirements of chemical and pharmaceutical substances, which are studied in the following order:

- (1.) Inorganic Chemicals and Preparations.
- (2.) Organic Chemicals and Preparations.
- (3.) Vegetable Drugs and Preparations.
- (4.) Animal Drugs and Preparations.

The work may be further classified as follows:

(a.) Continuation of first year work in Inorganic Qualitative Analysis, with special reference to testing for impurities in inorganic chemicals, according to the U. S. Pharmacopœia.

(b.) Lectures and recitations on the Quantitative estimation of chemicals and preparations, by both gravimetric and volumetric methods. The quantitative operations of the U. S. Pharmacopœia will be given special prominence in this work.

(c.) Lectures and recitations on methods for identification of the more important organic compounds.

(d.) Lectures and recitations on methods for separation and identification of the more important inorganic and alkaloidal poisons, in the presence of other organic material, illustrating the general methods employed in *Toxicology*.

(e.) Lectures and recitations on *Pharmaceutical Assaying*, which consists in the quantitative estimation of the active constituents in crude drugs and pharmacopœial preparations. This work familiarizes the student with the various standard methods of assaying.

Laboratory Work, 156 Hours.

(a.) Separation and identification of inorganic compounds, together with the identification of impurities in chemicals that fail to fulfill the pharmacopœial requirements for purity.

(b.) Specific gravity and melting point determinations; gravimetric determinations of calcium, magnesium, phosphoric acid, etc.; volumetric determinations by saturation, precipitation, oxidation and reduction; gasometric analysis; quantitative determinations of the U. S. Pharmacopœia.

(c.) Identification of such compounds as benzine, alcohol, chloroform, glycerin, glucose, sucrose, chloral hydrate and tannic-gallic, tartaric, benzoic, and salicylic acids.

(d.) Detection of inorganic and alkaloidal poisons, in the presence of other organic material. The student will work on poisoned foods, separating and identifying the poisons.

(e.) Estimation of the active constituents of cinchona, opium, nux vomica, aconite, belladonna, guarana, ipecac, podophyllum, fluid extracts, pill masses, scale-salts; also the determination of the amount of alcohol and glycerin in galenical preparations.

14. Microscopic Analysis of Drugs.*Laboratory Work, 48 Hours.*

(a.) Mounts are made of each substance examined, and also of its adulterants. These mounts are kept for comparison in working out the adulteration of any particular drug.

(b.) The following drugs are examined microscopically and chemically: Rhubarb, beeswax, lupulin, lycopodium, acacia, elm, mustard, pomegranate, gamboge, kamala, indigo, senna, tea, coffee, saffron, lactucarium, saffron. Also the spices: Pepper, capsicum, ginger, allspice, cloves, cinnamon, mace, and nutmeg.

15. Analysis of Urine.

Laboratory Work, 56 Hours.

Instruction is given on the composition of urine; on abnormal constituents and their pathological indications.

Laboratory work consists in the chemical and microscopical examination of normal and abnormal urine. The student is furnished with natural (not artificial) samples, obtained through resident physicians.

16. Pharmacognosy.

Laboratory Work, 26 Hours.

A review and continuation of the recognition of chemicals and crude drugs of the first year.

Attention is also given to the recognition of the pharmacopœial preparations.

17. Prescription Work.

Class Work, 26 Hours.

Lectures and recitations on the prescription, and on incompatibilities. Also a drill in Latin, with reading, interpreting, and correcting of Latin prescriptions.

Special attention is paid throughout the year to doses, solubility of chemicals, and to the composition of pharmaceutical preparations.

Laboratory Work, 78 Hours.

In the dispensing laboratory, students experiment with incompatible mixtures, thereby becoming familiar with the difficulties commonly met with at the prescription counter, and learning how best to overcome them. They fill numerous prescriptions taken from the files of drug stores, besides many typical ones furnished by the instructor.

The acquisition of manipulative skill—skill in measuring, weighing, powder folding, pill rolling, capsule filling, etc.—constitutes a prominent feature of this work.

18. State Examination.

This examination is conducted by the Committee on Education of the Indiana Pharmaceutical Association, and will be held Thursday, March 22, 1900.

TEXT-BOOKS.

The following text-books (latest editions) will be used :

Sturmer's Laboratory Course in Pharmacy.

U. S. Pharmacopœia.

Hoak's Dose Book.

Green's Qualitative Inorganic Chemistry.

Culbreth's *Materia Medica*.

Storer and Lindsay's Manual of Chemistry.

Sturmer and Vanderkleed's Quantitative Analysis.

Kellerman's Plant Analysis.

National Formulary.

Purdy's Practical Ureanalysis and Urinary Diagnosis.

Orndorff's Laboratory Manual.

With the exception of the last three books all are required in the first year.

EXPENSES.

The fees, which are payable in advance, are as follows :

FIRST TERM.

Entrance fee	\$5 00
Incidentals	5 00
Chemicals	14 00
Deposit for breakage	10 00
Total	\$34 00

SECOND TERM.

Incidentals	\$5 00
Chemicals	14 00
Total.....	\$19 00

There are no extra charges for the third term.

Good board may be had for \$2.50 a week, and by clubbing together students can reduce board to about \$2.00 or \$2.25. Furnished rooms can be had for about 75 cents per week, when two students room together. The total expense of board, room rent, fuel, fees, books, and laundry for twenty-six weeks need not exceed \$155, and for thirty-six weeks need not exceed \$200. A fee of \$5.00 will be required for the diploma. Students taking Course I do not have the privilege of rooming in the dormitory.

COURSE II.

DEGREE GIVEN.

Bachelor of Science in Pharmacy.

LENGTH OF COURSE.

Four years of thirty-six weeks each. The next year opens Wednesday, September 13, 1899.

REQUIREMENTS FOR ADMISSION.

These are stated in detail on page 142 of the general catalogue of the University. This catalogue will be furnished on application.

SUBJECTS IN COURSE II.

FRESHMAN YEAR.

Mathematics: Plane and Solid Geometry, and Higher Algebra.

Language: English Composition and Rhetoric, German, and French.

English Literature:

Science: Botany and Chemistry.

Drawing: Free-hand Drawing from Model; Studies in Light and Shade.

Military Drill:

SOPHOMORE YEAR.

Mathematics: Plane and Spherical Trigonometry.

Physics: General Physics; Mechanics; Sound; Heat; Light; Electricity and Magnetism.

Chemistry: Lectures in General Chemistry; Laboratory practice in General Chemistry, and Laboratory practice in Qualitative Analysis.

Language: German and French.

Literature: English Poems.

Biology: Laboratory practice.

Military Drill:

JUNIOR YEAR.

Literature: English Prose Writers.

Language: German or French.

History: General History.

Pharmacy: The same as Subject 1 in Course I. See page 12.

Therapeutics and Doses: The same as Subject 4 in Course I. See page 14.

Pharmacognosy: The same as Subject 5 in Course I. See page 15.

Medicinal Plants: The same as Subject 6 in Course I. See page 15.

Organic Chemistry: A part of Subject 7 in Course I. See page 15.

Quantitative Analysis: The same as Subject 8 in Course I. See page 16.

SENIOR YEAR.

Human Physiology:

Political Economy:

Materia Medica and Therapeutics: The same as Subjects 11 in Course I. See page 17.

Manufacturing Chemistry and Pharmacy: The same as Subject 12 in Course I. See page 18.

Pharmaceutical Analysis: A part of Subject 13 in Course I. See page 19.

Microscopic Analysis of Drugs: The same as Subject 14 in Course I. See page 20.

Analysis of Urine: The same as Subject 15 in Course I. See page 21.

**Pharmacognosy:* The same as Subject 16 in Course 1. See page 21.

Prescription Work: The same as Subject 17 in Course I. See page 21.

State Examination: The same as Subject 18 in Course I. See page 22.

Food Analysis:

Class and Laboratory Work.

Lectures on methods of food analysis and the detection of impurities and adulterations.

The student analyzes, and tests for adulteration, such foods as milk, butter, cheese, sugar, and vinegar. The sugar analysis includes polariscopic determinations.

Pharmaceutical Jurisprudence: Lectures on the legal duties and liabilities of a druggist.

Electro-Therapeutics: Lectures on the treatment of diseases by means of electricity. Practical demonstrations in the use of x-rays in surgery will also be given.

Water Analysis (Sanitary and Mineral): Lectures on the classification and composition of natural waters, methods of analysis, and interpretation of results.

Each student will subject two samples of water to mineral analysis, and five samples of drinking water to sanitary analysis.

Bacteriology: The same as subject 11 page 109 of the complete catalogue of the University. This subject may be chosen by the student in the place of Pharmaceutical Analysis, Food Analysis, and Water Analysis.

Thesis: As a condition of graduation, each student in this course must prepare a thesis upon some approved subject, requiring original study and investigation.

EXPENSES.

Entrance fee.....	\$5 00
Incidental fee per annum.....	10 00
Laboratory and library fees, per annum—	
Freshman.....	12 00
Sophomore.....	16 00
Junior.....	20 00
Senior.....	28 00

One-half of the incidental fee and one-half of the laboratory and library fee are payable at the beginning of the first term, and one-half of both at the beginning of the second term.

Laboratory fees cover expenses for drawing paper, chemicals, and all other laboratory material used by students, and for the use of microscopes and other apparatus.

Students are required to make deposits for breakage and use of apparatus in chemistry and pharmacy.

Freshman, for chemistry.....	\$2 50
Sophomore, for chemistry.....	5 00
Junior, for pharmacy.....	5 00
Senior, for pharmacy.....	10 00

STUDENTS 1898-99.

COURSE LEADING TO THE DEGREE OF GRADUATE IN PHARMACY.

FIRST YEAR.

HENRY J. ANDREW.....	LaPorte.
JOHN C. BEARD.....	McCordsville.
WILLIAM F. CLEETON.....	Higbee, Mo.
JACOB B. CLEM.....	Monroeville.
FRANK S. CROCKETT.....	LaFayette.
BENJAMIN B. CROSS.....	Lebanon.
GUY F. DAVIS.....	Lebanon.
GUS FERGER.....	Indianapolis.
AUGUST L. FLANDERMAYER.....	Cleveland, Ohio.
CHARLES H. FRANZ.....	Indianapolis.
FRANK F. FREDERICI.....	LaFayette.
CHARLES W. FRIEDMAN.....	Fort Wayne.
EDMUND A. GEYER.....	South Bend.
JOSEPH E. HANEY.....	Mexico.
WILLIAM HARTER.....	Newtonville.
JOHN T. HOGAN.....	LaFayette.
GLENN HOWELL..	Fairmount.
EUGENE JALBERT.....	Brazil.
WALTER W. JOHNSTON.....	Greensburg.
BERNARD S. KOOPMAN.....	Terre Haute.
PHILIP J. McCAULEY.....	LaFayette.
ROY C. McKENNON.....	Connersville.
WILLIAM B. McNIEL.....	Wheatfield.
CHARLES S. MILLER.....	Sheelman, Ga.
FRANK E. MILLER.....	Cleveland, Ohio.

ELZA O. RINGWALT	Halls Corner.
ANDREW SCHELE.....	Fort Wayne.
CHARLES SHROYER.....	Warsaw.
CLYDE N. SMITH.....	Antwerp, Ohio.
JOHN W. TUDOR	Homer, Ill.
DEL W. WARD.....	Rochester.
JOHN WHITE.....	Spencer.
PAUL E. WOLTER	South Bend.
CHRISTIAN H. YOUNG.....	Goeglein.

SECOND YEAR.

WM. W. ALEXANDER.....	Letart Falls, Ohio.
WARREN N. BENSON.....	Terre Haute.
HALLIE J. BERNHARD	Palmyra, Mo.
WM. M. BLAIR.....	LaFayette.
ERNEST A. BROWN	West LaFayette.
JOHN LOUIS BUTSCH	Lynnville.
HENRY L. BYERS.....	Trafalgar.
WALTER M. CARAWAY.....	Greenfield.
KARL J. DECKER	Ligonier.
WM. F. DOWNS	Battle Ground.
ERNEST ELLIOTT	Corvallis, Oregon.
WILL L. FITZGERALD	Rochester.
JOHN A. GARRETTSON	Terre Haute.
JOHN GIFFORD	Sheridan.
HARRY GUNDELFINGER	West LaFayette.
FRED D. HERBOLD	Eugene, Oregon.
CHAUNCEY R. HITCH	Hazelton.
CHARLES O. HOFFMAN	West Manchester, Ohio.
FRANK G. JOHNSON	Indianapolis.
SHERMAN A. JOHNSON.....	Plymouth.
J. F. W. KANZLER	Rockport.
A. H. KING	Indianapolis.
J. E. LEMMON	Greensburg.
ELBERT B. MERRITT	Scircleville.

FRED A. MOORE	Vincennes.
THOMAS E. MORRIS.....	Hobbs.
CHARLES J. MOUTOUX.....	Evansville.
HENRY M. MUGG.....	Quincy.
CHARLES W. ORR	Arcadia.
WILLIAM M. PURDY	Morocco.
JOHN D. PHELAN	Indianapolis.
CHARLES W. SCOTT.....	Indianapolis.
JOSEPH A. SIGL.....	Ft. Wayne.
OTTO L. SNYDER	Ft. Wayne.
WALTER C. STEDTFELD	Indianapolis.
CLEM THISTLETHWAITE...	Richmond.
CLARENCE V. WATERS.....	Eaton, Ohio.
OLIVER P. WITHERS	Knightsville.

COURSE LEADING TO THE DEGREE OF PHARMACEUTICAL CHEMIST.

SECOND YEAR.

WARREN N. BENSON	Terre Haute.
WM. M. BLAIR.....	LaFayette.
JOHN L. BUTSCH.....	Lynnville.
KARL J. DECKER.....	Ligonier.
SHERMAN A. JOHNSON..	Plymouth.
ELBERT B. MERRITT.....	Scircleville.
CHARLES J. MOUTOUX	Evansville.
GEORGE J. NUSBAUM.....	LaFayette.
JOSEPH O. PERKINS.....	LaFayette.

COURSE LEADING TO THE DEGREE OF BACHELOR OF SCIENCE IN PHARMACY.

CHARLES E. VANDERKLEED, Senior...	West LaFayette.
EARL A. MEANS, Senior.....	Shelbyville.
ELBERT W. RAWLINGS, Junior.....	New Harmony.
WILBER B. WESTFALL, Junior.....	West LaFayette.
J. H. ANDREWS, Sophomore.....	Seymour.

SUMMARY.

In course leading to Ph. G.—

First year.....	34
Second year.....	38
Total.....	<u>72</u>

In course leading to Ph. C.—

Second year.....	9
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In course leading to B. S. in Pharmacy..... 5

Total..... 86

Students counted twice..... 7

Total students in School of Pharmacy..... 79

ALUMNI.

With the Degree of Doctor of Pharmacy.

JOHN N. HURTY, M. D., pharmacist and analytical chemist, 102 North Pennsylvania Street, Indianapolis, Ind.; President, and Professor of Chemistry and Metallurgy in Indiana Dental College; Lecturer on Hygiene in Indiana Medical College; Chemist to the Big Four Railroad, and Secretary State Board of Health.

GEORGE W. SLOAN, M. D., President of the Sloan Drug Co., 22 West Washington Street, Indianapolis, Ind.; President of the American Pharmaceutical Association, 1879-1880; Lecturer on Pharmacy in Indiana Medical College; a member of the Indiana Board of Pharmacy.

JOSEPH R. PERRY, M. D., pharmacist, 356 East Washington Street, Indianapolis, Ind.

With the Degree of Graduate in Pharmacy.

1886.

ERNEST G. EBERHARDT, analytical chemist for Eli Lilly & Co., Indianapolis, Ind. Address, 116 North Arsenal Avenue.

MANUAL JAY, physician, Gunnison, Colo.

JOHN KENNEDY, deceased.

EDWIN J. MOWRY, pharmacist, Columbia City, Ind.

LOUIS H. SCHULMEYER, chemist for Daniel Stewart, wholesale druggist, Indianapolis. Address, 725 Capitol Avenue, N.

BERT D. WESTENFELDER, chemist to the American Oak Leather Co., Cincinnati, Ohio. Address, 247½ Clinton Street.

EMORY J. YEAGER, pharmacist, in the firm of Wells, Yeager & Best Co., LaFayette, Ind.

1887.

MILLARD CALDWELL, pharmacist, in the firm of Krauss & Caldwell, Hartford City, Ind.

WILLIAM H. DICKINSON, president and treasurer Butler Chemical Co., 160-162 Superior Street, Chicago, Ill.

CHARLES L. HACKETT, pharmacist, in the firm of John Hackett & Son, Roanoke, Ind.

WILLIAM M. ROSS, pharmacist, in the firm of Clay & Ross, Dickey, N. Dak.

ALBERT W. SHOUP, physician, Battle Ground, Ind.

1888.

PETER H. FETTERS, farmer, Goshen, Ind.

SAMUEL KENNEDY, physician, Shelbyville, Ind.

GEORGE C. MORRISON, pharmacist, Virginia Avenue and South Street, Indianapolis, Ind.

WILLIAM H. STUDLEY, business manager and pharmacist to the Private Sanitarium, 1370 Humboldt Avenue, Milwaukee, Wis.

WILLIAM H. VAWTER, pharmacist, in the Vawter-Boggs Drug Co., LaFayette, Ind.

1889.

ADEN L. CAVINS, pharmacist, Bloomfield, Ind.

HENRY H. HARRIS, Boswell, Ind.

LUTHER J. HORD, pharmacist, Ponca City, Oklahoma.

MERIT POST, with the American Advertising and Bill Posting Co., 280 Madison Street. Home address, 6314 Butler Street, Chicago, Ill.

CHARLES W. SHAFER, pharmacist, Mentone, Ind.

GEORGE SPITZER, Lecturer on Operative Pharmacy, Purdue University, LaFayette, Ind.

CORTICE M. WARNER, real estate agent, Indianapolis, Ind.

DON CARLTON WHITEHEAD, prescription clerk, with B. F. Schwab, 601 Summit Street, Toledo, O.

1890.

ROBERT W. ALLEN, pharmacist, 1788 W. Chicago Avenue, Chicago, Ill.

ELDEN BEASLEY, pharmacist, Union, Ind.

MOSES T. BOGGS, pharmacist, in the Vawter-Boggs Drug Co., LaFayette, Ind.

BERT CRITZ.

JOHN E. DUNLAVY, Greencastle, Ind.

WILLIAM E. EASTERDAY, prescription clerk at Some's Pharmacy, northeast corner Sixth and Ohio Streets, Terre Haute, Ind.

JOSEPH L. FEIBLEMAN, traveling salesman, with Daniel Stewart Co., Indianapolis, Ind. Address, 418 East New York Street.

GEORGE W. LACEY.

ALVIN H. LEESER, pharmacist, 1482 North Clark Street, corner Oakdale Avenue, Chicago, Ill.

HENRY W. MEINZEN, pharmacist, corner Chute and Maumee Avenue, Fort Wayne, Ind.

FRANK RIGGS, pharmacist, in the Frank Riggs Drug Co., Marion, Ind.

FRANK E. SHATTUCK, traveling salesman, with Chas. Leich & Co., Evansville, Ind.

MARION A. STOUT, pharmacist, Bluffton, Ind.

CHARLES W. WATKINS, pharmacist, at the Eichrodt Pharmacy, Illinois Street, Indianapolis, Ind.

JOHN M. WESTFALL, dispensing pharmacist, Polyclinic Dispensary, Missouri Medical College, St. Louis, Mo.

1891.

JOSEPH H. ANDERSON, pharmacist, Hull, Iowa.

JONATHAN M. BAUER, pharmacist, in the firm of The Ideal Pharmacy Co., 59 Huntington Street, Cleveland, Ohio.

ISAAC D. BONNETT, pharmacist, in the firm of I. D. Bonnett & Co., Shreve, Ohio.

PAUL D. BROWN, prescription clerk, with H. E. Glick, LaFayette, Ind.

- CHARLES C. CRAMPTON, physician, Delphi, Ind.
 AUGUST DIEHL, manufacturer of proprietary medicines, 1233
 North Fourteenth Street, LaFayette, Ind.
 WILLIAM S. GREEN, prescription clerk, with A. Angell, Denver,
 Colorado.
 WILLIAM J. HART, deceased.
 ALVIN L. HILLS.
 JAMES W. KYLE.
 JOSEPH O. McCARTY, deceased.
 JOHN S. MAX.
 OSCAR A. MEANS, pharmacist, 1228 Broadway, Logansport, Ind.
 GEORGE C. METZGER, deceased.
 LOUIS W. PLOGSTERTH, prescription clerk, with S. Mühl, 2135
 North Illinois Street, Indianapolis, Ind.
 FRED P. PYKE, pharmacist, Anderson, Ind.
 WILDEY F. REYNOLDS, pharmacist, corner of 10th and West
 Streets, Indianapolis Ind.
 DAVID L. RIFE, prescription clerk, with Market Pharmacy, 163
 East Market Street, Indianapolis, Ind.
 HARRY E. SHARRER, physician, Hammond, Ind.
 JAMES R. SPIVEY, prescription clerk, with C. C. Dean, Bluffton,
 Ind.
 FRANK O. STABLER, deceased.
 JULIUS W. STURMER, Professor of Pharmacy, Purdue University,
 LaFayette, Ind.

1892.

- JOSEPH D. BARTLETT, pharmacist in the firm of Bartlett & Co.,
 LaFayette, Ind.
 FRANK M. BEST, pharmacist in the firm of Wells, Yeager & Best
 Co., LaFayette, Ind.
 JOHN BRIGHT.
 ALBERT H. CAULKINS, traveling salesman, with Garhart Dental
 Mfg. Co., Indianapolis, Ind.
 FRANK CAVINS, prescription clerk, with A. L. Cavins, Bloom-
 field, Ind.

- MISS LOVE E. CRAMPTON, Delphi, Ind.
 GEORGE E. CRAVENS, pharmacist, Bloomfield, Ind.
 JAMES F. FISKE, prescription clerk, with W. R. Dickenson, Lead,
 South Dakota.
 NATHAN K. GARHART, president of the Garhart Dental Mfg. Co.,
 Indianapolis, Ind.
 L. EDWARD GREEN, prescription clerk, with Trunk Bros., 16th
 and Freemont Streets, Denver, Col.
 FRANK GRIFFITH, pharmacist, Huntington, Ind.
 MISS NINA B. HART, Boonville, Ind.
 BENJAMIN M. HOAK, Instructor in Materia Medica and Biology,
 Purdue University, LaFayette, Ind.
 EDWARD KADEL, manufacturing pharmacist, Cook, Bell & Black,
 Terre Haute, Ind.
 JOHN W. McMAHAN, physician, Rochester, Ind.
 JOHN H. MILLER, prescription clerk, with R. G. Moore, Vin-
 cennes, Ind.
 JOHN ROSCOE MUTZ, pharmacist, in the firm of Mutz & Lynch,
 Edinburg, Ind.
 EMIL REYER, manufacturing chemist for South Bend Medicine
 Co., South Bend, Ind.
 GEORGE B. SLOAN, secretary and treasurer Sloan Drug Co., 22
 West Washington Street, Indianapolis, Ind.
 FRANK M. THORN, deceased.
 THOMAS A. WEST, pharmacist, in the firm of Ott & West, Rock-
 ville, Ind.

1893.

- GEORGE W. BATES, Palmyra, Mo.
 JAMES BRADEN, deceased.
 JOSEPH E. CARSON, pharmacist, in the firm of J. E. Carson & Co.,
 West LaFayette, Ind.
 JOHN C. CLARK, prescription clerk, with Mühl & Co., Indian-
 apolis, Ind.
 ROWLAND E. CLARK, pharmacist, Wabash, Ind.
 JOSEPH L. CRAMER, pharmacist, Covington, Ohio.

MAYNARD M. ERB, Connersville, Ind.

J. R. FRANCIS, in the firm of The J. N. Hurty Pharmacy Co.;
Assistant Professor of Chemistry in the University of Indian-
apolis, Department of Dentistry, Indianapolis, Ind.

WALTER L. GERHART, prescription clerk, Field Pharmacy, Alli-
ance, Neb.

WALTER E. HARDMAN, physician, Roann, Ind.

ISAAC M. HENDERSON, pharmacist, with the Mount Sinai Hospital,
New York City.

GUS HESS, deceased.

JUSTUS C. HOUSER, chemist to The Houser Drug Co., Flat River,
Mo.

JACOB A. LONG, prescription clerk, with L. C. Davenport, Bluff-
ton, Ind.

MISS MYRTLE L. MCMAHAN, teaching in the public schools,
Terre Haute, Ind.

LOREN B. MILLER, deceased.

HENRY H. NEAL.

JOHN H. ROCKWOOD, Goodland, Ind.

JAMES H. WELLINGTON, prescription clerk, with R. G. Ruther-
ford, 180 Myrtle Avenue, Brooklyn, N. Y.

WOOD WILES, prescription clerk, with J. W. O'Harrow, Bloom-
ington, Ind.

LEONARD D. WORDEN, Connersville, Ind.

1894.

CHRISTIAN H. ALBERSMEYER, prescription clerk, with F. J. Mil-
ler, Fort Wayne, Ind.

WILLIAM N. ARNETT, prescription clerk, with Sloan Drug Co.,
22 West Washington Street, Indianapolis, Ind.

FRANK R. BASS, prescription clerk, with G. W. Bass, Moores-
ville, Ind.

HARRY T. S. BEST, prescription clerk, with Ashman & Gard,
Frankfort, Ind.

- DALLY BLAND, prescription clerk, with T. P. Marshall, Macon, Ga.
- FRANK J. BOATMAN, prescription clerk, with H. S. Upton, 730 Fort Wayne Avenue, Indianapolis, Ind.
- HARVEY A. BURKEE, in the firm of The Elliott Varnish Co., Philadelphia, Pa.
- ALEXANDER M. CARTER.
- GEORGE A. CLAPESATTLE, pharmacist, 512 Broadway, Fort Wayne, Ind.
- GEORGE C. CULLOM, pharmacist, in the firm of Cullom & Rous, Frankfort, Ind.
- EDWIN C. DOWNEY, attorney, Churubusco, Ind.
- OLIVER E. DUNN, pharmacist, Crawfordsville, Ind.
- FREDERICK H. FLAUGHER, prescription clerk, with E. C. Reick, 749 South East Street, Indianapolis, Ind.
- MISS MABEL E. FLEMING, prescription clerk, with Joseph T. Fleming, Princeton, Ind.
- WILLIS H. FOX, prescription clerk, with C. A. Fellows, Three Rivers, Mich.
- OTTO F. GRAHL, in the city department of the Ft. Wayne Drug Co., Ft. Wayne, Ind.
- NORRIS H. HARDING, Osgood, Ind.
- GEO. W. C. HAINES, pharmacist, Clarks Hill, Ind.
- LEONIDAS C. HINCHMAN, prescription clerk, with I. N. Heins, Illinois and Market Streets, Indianapolis, Ind.
- HARRY C. JAMES, prescription clerk, with the Hogan-Johnson Drug Co., LaFayette, Ind.
- ORLEY EVERT KENNON, prescription clerk, with A. C. Carver, Winchester, Ind.
- J. DILLON KING, pharmacist, in the firm of J. D. King & Co., Thirteenth and Main Streets, Terre Haute, Ind.
- WILLIAM F. KIRKHOFF, prescription clerk, with A. W. Clark, 801 Santa Fe Avenue, Denver, Colo.
- JOHN H. KNEALE, pharmacist, in the firm of Kneale & Kneale, Brookston, Ind.

- CHARLES O. MAPLE, prescription clerk, with C. M. Spicely, Bloomington, Ind.
- AMOS M. MARSH, prescription clerk, with Walter Fox, Alexandria Bay, N. Y.
- THOMAS P. MARSHALL, pharmacist, Macon, Ga.
- HENRY M. MEHLIG, physician, Tipton, Ind.
- PERRY M. MURPHY, pharmacist, in the firm of DeHority & Murphy, Elwood, Ind.
- GUSTAVUS A. PETERSDORF, interne at the City Hospital, Indianapolis, Ind.
- CONRAD SCHROEDER, pharmacist, in the firm of Ensminger & Schroeder, Shelbyville, Ind.
- OLIVER W. STEPHENSON, pharmacist, Orleans, Ind.
- FREDERICK A. STOKES, physician, 537 Massachusetts Avenue, Indianapolis, Ind.
- GEORGE H. STOTLER, prescription clerk, with Edward Ferger, Bates House Pharmacy, Indianapolis, Ind.
- EDWARD C. TINSLEY, physician, 1603 Columbia Avenue, Indianapolis, Ind.
- ALVA I. ULRICH, pharmacist, in the firm of Briggs & Ulrich, Kalamazoo, Mich.

1895.

- FRANK W. ARTHUR, prescription clerk, with T. N. Cunningham, 136 N. Main Street, Lima, Ohio.
- ARRY BALDWIN, prescription clerk, with F. H. Hubbard, Noblesville, Ind.
- HENRY L. BEERMAN, pharmacist, 701 Indiana Avenue, Indianapolis, Ind.
- ARTHUR BEUKE, with The Fort Wayne Drug Co., Wholesale Druggists, Fort Wayne, Ind.
- RUDOLPH P. BISCHOFF, prescription clerk, with Meyer Bros., Ft. Wayne, Ind.
- WALTER W. BRIGGS, pharmacist, in the firm of Briggs & Ulrich, Kalamazoo, Mich.
- JAMES D. BROWN, pharmacist, Burnettsville, Ind.

- ARTHUR B. CARR, pharmacist, Alabama and Nineteenth Streets, Indianapolis, Ind.
- CHARLES CHAVIS, prescription clerk, with D. M. Moroney, 2484 West Michigan Street, Indianapolis, Ind.
- CASSIUS E. ELLIOTT, pharmacist, Sheridan, Ind.
- EDWARD FERGER, pharmacist, Bates House Pharmacy, Indianapolis, Ind.
- GEORGE L. GARVER, Connersville, Ind.
- MISS HELENA K. GRAY, house physician of the National Temperance Hospital, Chicago, Ill.
- EDWARD H. JACKSON, pharmacist, in the firm of Wilson & Jackson, Long Beach, Cal.
- WILLIAM C. JONAS, pharmacist, Brownsville, Ind.
- JOHN H. KAPPEL, pharmacist, 360 W. Main Street, Fort Wayne, Ind.
- CORYDON M. KNOWLTON, pharmacist, Topeka, Kan.
- MARTIN J. MAUCH, prescription clerk, with W. D. Simpkins, Boswell, Ind.
- JOHN L. MCCLUNG, prescription clerk, with G. P. Keith, Rochester, Ind.
- BERT L. McDILL, prescription clerk, with T. R. Thornburg, 190 Fort Wayne Avenue, Indianapolis, Ind.
- CLAY F. MEEK.
- HUBERT O. MOORE, prescription clerk, with J. R. Perry, 356 East Washington Street, Indianapolis, Ind.
- HARRY C. NEWLAND, bookkeeper for James S. Robinson, drugs, Memphis, Tenn.
- GEORGE ORF, pharmacist, corner Capitol Avenue and Morris Street, Indianapolis, Ind.
- SAMUEL R. PENSE, pharmacist, Rossville, Ind.
- CHARLES W. REHLING, pharmacist, Barr and Washington Streets, Fort Wayne, Ind.
- ERNEST A. RICHEY, with the Prudential Life Insurance Co., Richmond, Ind.
- REASON D. SANDERS, Columbus, Ind.

- WILLIAM I. SCOTT, interne at the National Military Home,
Marion, Ind.
- WILLIAM J. SNODDY, pharmacist, West LaFayette, Ind.
- BENJAMIN B. TAYLOR, prescription clerk, with T. E. Bradshaw,
Thorntown, Ind.
- JOHN F. THORNTON, dispensing pharmacist, at Eastern Indiana
Hospital for Insane, Richmond, Ind.
- MISS AGNES E. UHL, interne at the Woman's Hospital, Thirty-
second Street and Rhodes Avenue, Chicago, Ill.
- CHARLES E. VANDERKLEED, Student-Assistant in Chemistry, Pur-
due University, LaFayette, Ind.
- WILLIAM M. WORSHAM, prescription clerk, with A. M. Andrews,
Connersville, Ind.

1896.

- JOHN W. ALMOND, prescription clerk, with C. F. Kolling, 1705
Prospect Street, Indianapolis, Ind.
- WM. R. BANNON, pharmacist, Fletcher Avenue and Noble Street,
Indianapolis, Ind.
- HARRY A. BIRK, analytical chemist, with J. N. Hurty, 102
North Pennsylvania Street, and assistant chemist to the State
Board of Health, Indianapolis, Ind.
- J. E. BLINN, prescription clerk, with M. A. Morris, Frankfort,
Ind.
- JOSEPH A. DEMMING, pharmacist, 863 St. Clair Street, Cleve-
land, Ohio.
- FRED H. EBERSHOFF, prescription clerk, with E. M. Schnaible,
LaFayette, Ind.
- HENRY G. FOEHL.
- H. E. FREEHAFFER, prescription clerk, with R. P. Milton, South
Bend, Ind.
- JOHN P. FRITZ, pharmacist, 355 Virginia Avenue, Indianapolis,
Ind.
- EDWARD R. HACKETT, dispensing pharmacist at the National
Military Home, Marion, Ind.

- F. P. HOOPENGARDNER, prescription clerk, with Maddox, Montpelier, Ind.
- HARRY C. HUNTER, Fort Wayne, Ind.
- CHARLES E. INCO, prescription clerk, with John Laval & Sons, 220 Main Street, Evansville, Ind.
- DAVID C. JORDAN, prescription clerk, with Bartlett & Co., LaFayette, Ind.
- L. B. KING, prescription clerk, with E. E. Stewart, Indianapolis, Ind.
- E. F. KRATZER, manager of Dr. W. H. Johnson's pharmacy, 2422 Station Street, Indianapolis, Ind.
- EDWARD L. MERTZ, pharmacist, in the firm of Mertz & Co., 434 Calhoun Street, Fort Wayne.
- W. W. MULKEY, prescription clerk, with W. H. Brannon, Buena Vista, Ga.
- A. D. McDONELL, prescription clerk, with Hogan-Johnson Drug Co., LaFayette, Ind.
- C. M. McKELLIPS, Professor of Pharmacy, State Agricultural College, Corvallis, Ore.
- J. F. REINHART, prescription clerk, with Campen Bros. 1303 South Adams Street, Peoria, Ill.
- CARL SCHELLER, pharmacist, Evansville, Ind.
- EMIL N. SCHNAIBLE, pharmacist, Fourth Street, LaFayette, Ind.
- MISS INEZ THOMPSON, prescription clerk, with Dean, Dunlap, Iowa.
- HARRY E. WEINLAND, prescription clerk, with F. W. Shultz, Brazil, Ind.

1897.

- EDMUND B. BARNARD.
- HENRY M. BENTLY, pharmacist, Sidney, Ill.
- HARRY J. BORST, prescription clerk, with G. F. Borst, 726 South Meridian Street, Indianapolis, Ind.
- CHARLES B. CRISS, pharmacist, in the firm of Wooden & Criss, Gosport, Ind.

- CARM S. CUNNINGHAM, prescription clerk, with the Boston Drug Co., 12th and Franklin Ave., St. Louis, Mo.
- VINCENT A. DITTOE, prescription clerk, with H. G. Sommers, Ft. Wayne, Ind.
- FRANK E. EHLE, Manager of Brown's Pharmacy, Kokomo, Ind.
- FRANK R. ELDRED, analyst, Ligonier, Ind.
- HUGH GRIBBON, prescription clerk, with J. E. Hendricks, Peru, Ind.
- ADOLPH F. KLUTH, prescription clerk, with D. H. Lohmann, LaFayette, Ind.
- AUGUST KOEHN, prescription clerk, with W. L. Waltemath, Lewis and Hanna Streets, Ft. Wayne, Ind.
- LOUIS A. KRAMER, pharmacist, Washington and Clay Streets, Ft. Wayne, Ind.
- HENRY J. LINDEMAN, prescription clerk, with J. N. Jones, Washington, Ind.
- JOHN W. MCKENZIE, studying medicine at the Indiana Medical College, Indianapolis, Ind.
- HARRY G. NORWOOD, prescription clerk, with Long & Staley, Lebanon, Ind.
- GEORGE J. NUSBAUM, Student-Assistant in Chemistry, Purdue University, LaFayette, Ind.
- MISS DELPHA OREM, teaching school, Bennington, Ind.
- JOSEPH O. PERKINS, Student-Assistant in Pharmacy, Purdue University, LaFayette, Ind.
- GILBERT M. PHARES.
- OSEE A. RENAHAN, prescription clerk, with Chambers Bros., Montpelier, Ind.
- FRANK A. ROESENER, prescription clerk at Stuckmeyer's pharmacy, Madison Ave. and Dunlop Street, Indianapolis, Ind.
- OSCAR E. RUSSELL, prescription clerk, with Bradley Bros., Huntington, Ind.
- ROBERT B. SPRING, prescription clerk, with the Wells-Yeager-Best Co., LaFayette, Ind.
- CHARLES W. STARZ, pharmacist, Kenney, Ill.

WILL C. STURGIS, prescription clerk, with M. A. Stout, Bluffton, Ind.

ALBERT J. THOMPSON, manufacturing pharmacist, with J. C. Simmons, Graham, N. C.

EARL P. WAGNER, prescription work, with E. R. Vanderhoof, South Bend, Ind.

CARL C. WEISS, manufacturing pharmacist, with Ward Bros., Indianapolis, Ind.

FRED R. WIDMER, pharmacist, Dayton, Ind.

JESSE E. WILSON, prescription clerk with L. A. Gable, Illinois and 16th Sts., Indianapolis, Ind.

ALBERT E. YEAGER, manager, Jonesville Pharmacy, Jonesville, Ind.

1898.

THOMAS H. BATTLE, prescription clerk with Holtzclaw & Gilbert, Perry, Ga.

GEORGE L. BERRY, prescription clerk with Erdelmeyer & Son, Indianapolis, Ind.

JAY L. BITTLE, Wingate.

EDGAR K. BRAZELTON, Princeton.

ERNEST E. BROCKMAN, Mt. Sterling, Ill.

DEWITT G. BROWN, pharmacist in the firm of Dr. G. Brown & Son, Crescent City, Ill.

ELMER R. BURGIN, prescription clerk, with L. C. Neaville, Pittsboro, Ind.

THOMAS H. CLOSE, studying medicine at the University of Louisville, Louisville, Ky.

JOHN W. CONNOR, prescription clerk, with Bert A. Drees, Lafayette, Ind.

EARL H. COSNER, prescription clerk, at Allen's pharmacy, Greencastle, Ind.

EDWARD L. FIESER, prescription clerk, with Alex. Ruh, Rochester, Ind.

GEORGE W. HAVENS, prescription clerk, with F. B. Johnson & Co., Rushville, Ind.

- FRED C. KAPPUS, prescription clerk, with E. U. Hague, 40 W. Broad St., Elyria, O.
- WARREN M. KNAPP, pharmacist, in the firm of Flora & Knapp, Flora, Ind.
- WALTER S. LAWSON, prescription clerk, with J. C. Whiteford, 490 Madison St., Chicago, Ill.
- WILLIAM J. LENTZ, prescription clerk, with M. Schwartz, 2150 Talbott Ave., Indianapolis, Ind.
- EUGENE D. LUKE, prescription clerk, with Houseworth Bros., Elkhart, Ind.
- CHARLES R. LUSK, prescription clerk, with Lawrence Burns, Otterbein, Ind.
- OTTO LIENKAEMPER, prescription clerk, with R. Schwegler, LaFayette, Ind.
- LEOPOLD A. MATTES, prescription clerk, with R. P. Milton, South Bend, Ind.
- F. W. H. MEINZEN, prescription clerk, with H. Meinzen, Chute and Maumee Ave., Ft. Wayne, Ind.
- FRANKLIN W. MILLER, prescription clerk, with Frank Riggs Drug Co., Marion, Ind.
- GUY B. MILLER, prescription clerk, with Dawson & Richter, Rochester, Ind.
- W. H. O. MINTER, studying medicine at the Indiana Medical College, Indianapolis, Ind.
- JUDSON D. MOSCHELLE, prescription clerk, at Crawford's pharmacy, North and Pennsylvania Streets, Indianapolis, Ind.
- SIEGMAR MÜHL, JR., prescription clerk, with S. Mühl, 949 N. Illinois Street, Indianapolis, Ind.
- CLYDE McCARTY, prescription clerk, at Leavitt's pharmacy, Worthington, Ind.
- AUGUSTUS McMILLAN, prescription clerk, with W. J. Snoddy, West LaFayette, Ind.
- CLARENCE S. PRENTISS, prescription clerk, with Dr. W. H. Russell, Montrose, Mich.
- EDWARD L. RUDIG, pharmacist, in the firm of Perry & Rudig, North Manchester, Ind.
- J. W. MILLER SCHMITT, deceased.

FREDERICK W. STELLHORN, prescription clerk, with C. L. Rastetter, 305 E. Washington Street, Ft. Wayne, Ind.

HENRY V. VOGES, chemist to the Tilden Co., 1718 Olive Street, St. Louis, Mo.

FRED. H. VOGT, prescription clerk, with C. C. Hahn, Morris St. and Kentucky Ave., Indianapolis, Ind.

CHARLES A. WARREN, prescription clerk, with E. B. Elder, Watseka, Ill.

With the Degree of Pharmaceutical Chemist.

1894.

JUSTUS C. HOUSER, chemist to the Houser Drug Co., Flat River, Mo.

1896.

WILLIAM R. BANNON, pharmacist, Fletcher Avenue and Noble Streets, Indianapolis, Ind.

H. E. FREEHAFFER, prescription clerk, with R. P. Milton, South Bend, Ind.

JOHN P. FRITZ, pharmacist, 355 Virginia Avenue, Indianapolis, Ind.

CHARLES E. INCO, prescription clerk, with John Laval & Sons, 220 Main Street, Evansville, Ind.

EDWARD L. MERTZ, pharmacist, in the firm of Mertz & Co., 434 Calhoun Street, Ft. Wayne, Ind.

A. D. McDONELL, prescription clerk, with the Hogan Johnson Drug Co., LaFayette, Ind.

C. M. McKELLIPS, Professor of Pharmacy, State Agricultural College, Corvallis, Oregon.

EMIL M. SCHNAIBLE, pharmacist, LaFayette, Ind.

MISS INEZ THOMPSON, prescription clerk, with Dean, Dunlap, Iowa.

CHARLES E. VANDERKLEED, Student-Assistant in Chemistry, Purdue University, LaFayette, Ind.

HARRY E. WEINLAND, prescription clerk, with F. W. Shultz, Brazil, Ind.

1897.

EDMUND B. BARNARD.

HENRY M. BENTLEY, pharmacist, Sidney, Ill.

HARRY A. BIRK, analytical chemist, with J. N. Hurty, 102 N. Pennsylvania Street, and assistant chemist to the State Board of Health, Indianapolis, Ind.

FRANK E. EHLE, manager of Brown's pharmacy, Kokomo, Ind.

FRANK R. ELDRÉD, analyst, Ligonier, Ind.

JOHN W. MCKENZIE, studying medicine at the Indiana Medical College, Indianapolis, Ind.

WILL C. STURGIS, prescription clerk, with M. A. Stout, Bluffton, Ind.

EARL P. WAGNER, prescription clerk, with E. R. Vanderhoof, South Bend, Ind.

CARL C. WEISS, manufacturing pharmacist, with Ward Bros., Indianapolis, Ind.

1898.

JOHN W. ALMOND, prescription clerk, with C. F. Kolling, 1705 Prospect St., Indianapolis, Ind.

ERNEST E. BROCKMAN, Mt. Sterling, Ill.

DEWITT G. BROWN, pharmacist, in the firm of Dr. G. Brown & Son, Crescent City, Ill.

JUDSON D. MOSCHELLE, prescription clerk, at Crawford's pharmacy, North and Pennsylvania Streets, Indianapolis, Ind.

AUGUSTUS McMILLAN, prescription clerk, with W. J. Snoddy, West LaFayette, Ind.

CLARENCE S. PRENTISS, prescription clerk, with Dr. W. H. Russell, Montrose, Mich.

HENRY B. VOGES, chemist to the Tilden Co., 1718 Olive St., St. Louis, Mo.

CHARLES A. WARREN, prescription clerk, with E. B. Elder, Watseka, Ill.



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